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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,164	10/28/2003	Yoshinobu Tanaka	ACO 365	7629

23581 7590 02/04/2005

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EXAMINER

SWINEHART, EDWIN L

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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JE

Office Action Summary	Application No. 10/696,164	Applicant(s) TANAKA ET AL.	
	Examiner Ed Swinehart	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on ____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) ☐ Claim(s) ____ is/are allowed.

6) ☒ Claim(s) 1-22 is/are rejected.

7) ☐ Claim(s) ____ is/are objected to.

8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____	6) <input type="checkbox"/> Other: ____

U.S. Patent and Trademark Office
PTOL-326 (Rev. 1-04)

Office Action Summary

Part of Paper No./Mail Date 02012005

DETAILED ACTION

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the oil cooler mounted on the exhaust side, and the air intake pipe "or" the exhaust pipe extending from the cylinder head to a lateral side of the crankcase (Applicant shows and discloses only "both" extending in this fashion) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,16,17,20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizumura et al.

Mizumura et al. discloses the claimed invention, including an oil cooler mounted upon an outer wall face of the engine. Removal of the cooler cover exposes the coolant water passage. The cooler is situated in a spaced between the exhaust and engine face as claimed.

Re “for a small watercraft”, such is a statement of intended use, carrying little to no weight in the claim.

Re claim 21, a groove is formed under the oil filter.

4. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hufendick et al.

Hufendick et al. discloses the claimed invention, including a removable cover on an outer wall of an engine, which provides a mounting surface for an oil filter, as well as temperature and pressure sending units. Removal of the cover exposes the coolant passage, and gains access to the oil cooler.

5. Claims 1,2 and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Stump et al.

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Stump et al. discloses an oil cooler disposed upon an outer wall of an engine. A pair of passage forming plates **3** and **4** are provided, and provide grooves as claimed. Removal of both plates exposes the coolant passage.

Re "for a small watercraft", such is a statement of intended use, carrying little to no weight in the claim.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stump et al. in view of Hufendick et al.

Stump fails to disclose oil filter and sending unit mount provisions provided by the cover.

Hufendick et al. is discussed above.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide oil filter and sending unit mounting portions to the cover of Stump as taught by Hufendick et al.

Such a combination would have been desirable at the time the invention was made so as to provide ease in access and maintenance.

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stump et al. in view of Hufendick et al. as applied to claim 4 above, and further in view of Olson.

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Stump et al. Fails to disclose the addition of an additional auxiliary cooler.

Olson teaches same.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add on an auxiliary cooler to the engine of Stump as taught by Olson.

Such a combination would have been desirable at the time the invention was made so as to provide additional cooling.

9. Claims 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizumura et al. in view of Roycroft.

Mizumura fails to disclose an open loop cooling system, nor a waterjet propulsion unit.

Roycroft teaches the use of a conventional motorcycle engine within a waterjet propelled watercraft.

It would have been obvious to one of ordinary skill in the art at the time of the invention to power a watercraft with the engine of Mizumura et al. as taught by Roycroft.

Such a combination would have been desirable at the time the invention was made so as to provide an efficient and well cooled engine as a watercraft power plant.

Re "open loop", when employing an automotive engine in a watercraft, its notoriously old and well known to provide an open loop cooling system, due to the presence of an abundance of cold water. Provision of such an open loop cooling system would have been obvious to one of ordinary skill in the art at the time of the invention, providing no unexpected results.

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10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizumura et al. in view of Wehrmann et al.

Mizumura et al. fails to disclose the heat exchanger plate structure as claimed.

Wehrmann et al. Teaches a stacked plate heat exchanger as claimed.

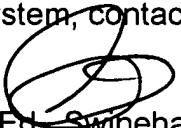
It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a heat exchanger to Mizumura et al. as taught by Wehrmann et al.

Such a combination would have been desirable at the time the invention was made so as to provide an effective yet easy to construct cooler.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Swinehart whose telephone number is 703-308-2566. The examiner can normally be reached on Monday through Thursday 6:30 am to 2:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ed Swinehart
Primary Examiner
Art Unit 3617